dried pupae found within. These may be described as follows:—

Psyllid pupa.— Length (abdomen shrunken). 1.2 to 1.4 mm.; width, 1 to 1.2 mm. The wing pads in their naturally half-spread condition give an apparent width, equaling the somewhat shrunken length; they are distinctly longer than width of thorax. Pupa rather oval or rounded in outline, widest in middle of abdomen; finely and somewhat sparsely pubescent on body, wing-pads and antennae; abdomen long pubescent. Pale yellowish, eyes black; mesonotum, pronotum, and top of head roseate; anterior pair of wing-pads pale rosy yellowish, hind wing-pads paler. Abdomen pale greenish, with an anterior median rosy yellowish area, the terminal portion broadly brownish with a median row of small black spines ending in a spiny tubercle, 13 spines altogether in the row, and one on each side of row on posterior edge of abdomen. Spines are arranged thus: first (anteriorly) three in a triangle with apex posteriorly directed; then three more in a similar triangle; then the bunch of six in three pairs with a larger central one, giving the appearance of a spinigerous tubercle. These spines grow longer and stouter towards posterior end of row. On segment anterior to that bearing the first three above mentioned, there seem to be an additional hardly visible three. But in the larger specimen there is in place of these only one quite conspicuous one of good size. Legs and under side of body pale greenish, sternal and anterior portions yellowish rosy, the legs more or less shaded with same color. Antennae greenish at base, more rosy or pale apically.

Described from two specimens, taken from dried galls found Nov. 26. The galls picked May 14 disclosed nothing.

The very small, elongate, whitish eggs of this psyllid were found on a cluster of young leaves, May 14. The eggs were quite thickly attached to the under surface of the leaf, adhering by one end, and slanted toward the tip of the leaf. A fewer number also occurred on the upper surface. But a considerable number of the just-hatched young were found on upper surface, where they were beginning to bury themselves in the substance of the leaf to form their galls.

The *Celtis* is probably the var. *reticulata*.

Two small hymenopterous parasites issued from the dried galls above mentioned. They have been determined by Mr. Wm. H. Ashmead as *Ceraphron* sp., and *Tetrastichus* sp.

PHTHIRIA SULPHUREA LOEW.

BY T. D. A. COCKERELL, N. MEX. AGR. EXP. STA.

Described from the female. About 3 mm. long; yellow, wings hyaline. Head dull chrome yellow, ocelli black, eyes dull purple; proboscis about twice as long as head; face with sparse fine whitish pubescence; antennae chrome yellow; third joint more than twice as long as the other two combined, about twice as long as broad, pointed, but with a small tooth almost at the end, so as to appear bifurcate or deeply emarginate; without bristles.

Thorax pale delicate greenish-yellow, with

three pale longitudinal bands, evanescent posteriorly before reaching the scutellum. Halteres yellow, club large, somewhat longer than its pedicel. Abdomen shovel shaped, deep chrome yellow, thinly pubescent above with whitish hairs, which give it a sericeous appearance in certain lights.

Legs pale yellow, tibiae slightly dusky, tarsi blackish at their distal ends, otherwise brownish.

Wings clear, iridescent, veins dark brown, the first longitudinal paler.

Hab. On yellow flowers of Compositae, grounds of Agricultural College, Las Cruces, N. M., Sept. 1894 (*Miss J. Casad*).

A ♂ was taken at San Augustine, N. M., on flowers, Aug. 29, 1894 (*Ckll.*, 2260). It resembles the ♀, but the abdomen is narrower and the eyes are contiguous.

This species is interesting from its colour, which is exactly that of the flowers it frequents. It occurs on the same flowers as the similarly colored bee, *Perdita luteola* Ckll. ined. Prof. C. H. T. Townsend tells me that he remembers finding a similar species in Michigan, but it was not determined.

[This paper was received as the description of a new Dipteron and its true character learned only in time to change the title. Ed.]

LIFE HISTORY OF CLISIOCAMPA FRAGILIS STRETCH.

BY HARRISON G. DYAR, A. M., NEW YORK.

C. fragilis Stretch.
1881 — *Stretch*, Papilio, i, 64.
incurva Hy. Edwards.
1882 — Hy. Edw., Papilio, ii, 125.
discolorata Neumoegen.
1893 — Neum., can. ent., xxv, 4.
var. perlutea Neumoegen and Dyar.
1893 — N. and D., Journ. N. Y. ent. soc., i, 31.
var. constrictina Neumoegen and Dyar.
1893 — N. and D., Journ. N. Y. ent. soc., i, 30.
lutescens Neumoegen and Dyar.
1893 — N. and D., Journ. N. Y. ent. soc. i, 31.
var. mus Neumoegen.
1893 — Neum., Can. ent., xxv, 4.
var. azteca Neumoegen.
1893 — Neum., Can. ent., xxv, 5.

Synopsis of Varieties.

Fore wings all pale luteous . *perlutea.*
Fore wings partly brown . *constrictina.*
Fore wings brown, the lines only pale or slightly spreading . . . *fragilis.*
Fore wings dark gray brown . . *mus.*
Fore wings darker, blackish . . *azteca.*

I know of the larva from Nevada (Prof. J. J. Rivers), Montana (Mr. C. A. Wiley), Colorado (Mr. H. W. Nash) and Wyoming. I feel satisfied from a comparison of bred and captured specimens from these and other localities that there is only this one species from the Rocky Mountains to the Sierras and from Canada (Mr. F. H. Wolley Dod) to Mexico. *C. fragilis* is the western representative of *americana*, and is in turn represented in the Pacific Northwest by *pluvialis*. *C. disstria* extends throughout the ranges of *americana* and *pluvialis* and also extends into California (*erosa* and *thoracica* are synonyms); but does not enter the range of *fragilis* to my knowledge.* The other species (*californica*, *constricta* and *ambisimilis*) appear to be confined to California, and are yet imperfectly worked out. The following life history is based on larvae bred from eggs kindly sent me by Mr. H. W. Nash of Pueblo, Col.

Eggs. Columnar, flat above, rounded below; upper surface round or elliptical

* Since the above was written, I have seen *disstria* from Guadalajara, Mexico.